

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,828	06/27/2005	Werner Thoren	THOR3002/FJD	6792
23364 7590 01/11/2007 BACON & THOMAS, PLLC 625 SLATERS LANE			EXAMINER	
			LIN, WEN TAI	
FOURTH FLOOR ALEXANDRIA, VA 22314		•	ART UNIT	PAPER NUMBER
		•	2154	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MO	NTHS	01/11/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
Office Action Summary		10/506,828	THOREN, WERNER			
		Examiner	Art Unit			
	•	Wen-Tai Lin	2154			
	The MAILING DATE of this communication app					
Period fo	, ,					
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on <u>07 Se</u>	eptember 2004.				
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
4)🖂	Claim(s) 15-28 is/are pending in the application	1.				
	4a) Of the above claim(s) is/are withdrawn from consideration.					
_	5) Claim(s) is/are allowed.					
	Claim(s) <u>15-28</u> is/are rejected.					
	Claim(s) is/are objected to.	· alastian vasuinamast				
اــا(٥	Claim(s) are subject to restriction and/or	election requirement.				
Applicati	on Papers					
9) 🗌 🤈	The specification is objected to by the Examine	r.				
10)🛛	10) $\boxtimes$ The drawing(s) filed on <u>07 September 2004</u> is/are: a) $\square$ accepted or b) $\boxtimes$ objected to by the Examiner.					
	Applicant may not request that any objection to the	- · ·				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	nder 35 U.S.C. § 119					
_	12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:					
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
			<b>-</b> .			
Attachmen		_				
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da				
Notice of Draisperson's Patent Drawing Review (PTO-948)   Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   Notice of Informal Patent Application (PTO-152)						

Art Unit: 2154

Page 2

## **DETAILED ACTION**

- 1. Claims 15-28 are presented for examination.
- 2. The drawings are objected to under 37 CFR 1.83(a) because Figure 2 fails to show English legends as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP 608.02(d).
- 3. Claims 18, 20 and 22-28 is/are objected to because the following terms lack antecedent basis:

in claim(s) 24-25: "the process control station";

in claim(s) 26: "the field device";

in claim(s) 22: "the specifications";

in claim(s) 26: "the field data";

in claim(s) 23: "the data description file";

in claim(s) 28: "the user";

in claim(s) 26: "the acquired process data"; and

in claim(s) 18 and 20: "the process parameter".

Art Unit: 2154

Claim Rejections - 35 USC § 102

Page 3

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United

States.

5. Claims 15-22 and 25-28 are rejected under 35 U.S.C. 102(b) as being

anticipated by Dreste et al.[U.S. Pat. No. 5388252].

6. As to claim 15, Dreste teaches the invention as claimed including: a method for

reducing an amount of process data to be transferred from a field device [e.g., 10 or 30,

Fig.1], the process data including information concerning the operating condition of the

field device, and/or information concerning process variables registered with the field

device, and/or identification data of the field device [e.g., col.1 lines 16-36; Figs. 8-9;

i.e., information about power supply voltages on different units of the machine],

comprising the steps of:

evaluating and storing the process data occurring during an interval between two

transfers of data, wherein the process data are reduced by means of the evaluating;

and transferring the reduced process data to a process control center [e.g., claim 1 on

cols. 17-18].

Art Unit: 2154

7. As to claim 16, Dreste further teaches that transfer of the reduced process data is executed only at the occurrence of specified conditions [e.g., 190, Fig.13].

Page 4

8. As to claim 17, Dreste teaches that the method further comprises the step of: dividing the process data in the evaluating into static and dynamic data [e.g., repeated and non repeated data], wherein:

process data which have changed since the last executed evaluating are classified as dynamic data [e.g., col.11 line 48 – col. 12 line 51; i.e., effectively, only changed data are transmitted].

9. As to claim 18, Dreste further teaches that for the dynamic data, coded ranges are specified [i.e., since the information is coded in ASCII format, wherein each of the displayable characters is represented as an 8-bit code];

and only the code of the affected range, in which the process parameter is contained, is transferred to the process control center [see the example at cols. 11-12, wherein by comparing current image with the previous image, only changed data are packed and transmitted].

- 10. As to claim 19, Dreste further teaches that static data are transferred as binary state-values [e.g., col.12 lines 1-10].
- 11. As to claim 20, Dreste teaches that the method further comprises the step of:

Art Unit: 2154

forming from the dynamic data, a data word to be transferred, wherein:

Page 5

the data word represents the altered value of the process parameter, or the difference between the new value and the old value of the process parameter [e.g., 206, Fig. 13; col. 12 lines 35-67; i.e., the data word is formed from the XOR results].

12. As to claims 21-22, Dreste further teaches that

the specifications for the execution of the transfer of the reduced process data, can be influenced by a user, based on the occurrence of specified events [Figs. 11-12; 190, Fig.13; i.e., a user can influence the transfer of the reduced process data by initiating the modem, followed by injecting various command to monitor/analyze the state of the device being diagnosed].

- 13. As to claim 25, Dreste further teaches that the transfer of data from the field device to the process control station is unidirectional; and a bidirectional communication is then implemented when data from the process control station must be transferred to the field device [claim 1].
- 14. As to claim 26, since the features of this claim can also be found in claims 15, it is rejected for the same reasons set forth in the rejection of claims 15 above.
- 15. As to claim 27, Dreste further teaches that said evaluation/control unit and said storage unit are part of a field device [e.g., col.3 lines 44-58].

16. As to claim 28, Dreste teaches that the apparatus further comprises: an operating and display unit, wherein:

the specifications which can be influenced by the user are entered by means of said operating- and display-unit [e.g., Fig.2; col.3 lines 58-66; 190, Fig.13].

## Claim Rejections - 35 USC § 103

- 17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 18. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dreste et al.(hereafter "Dreste")[U.S. Pat. No. 5388252], as applied to claims 15-22 and 25-28 above.
- 19. As to claim 23, Dreste does not specifically teach that an individual device description file is assigned to the field device by means of the identification data; and information concerning the field device is read out of the data description file.

Page 7

Art Unit: 2154

However, individual field device having an associated description file for showing the principle of the device's operation and diagnostic steps is well known in the art of field service.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an individual device description file for Dreste's photographic printer because it offers quick assistance to the person who performs remote diagnostic for the device [e.g., col.3 lines 32-66].

20. As to claim 24, Dreste does not specifically teach using the Internet as communication platform between the field device and the process control station.

However, remote diagnostic system using the Internet as communication platform is well known in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to also include the Internet as Dreste's communication platform because it enables Dreste's remote diagnostic task to be initiated from anywhere the Internet is available.

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Salesky et al.

[U.S. PGPub 20050080850]; and

Schillings et al.

[U.S. Pat. No. 6968396].

Application/Control Number: 10/506,828 Page 8

Art Unit: 2154

22. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 days from the mail date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b)).

## Conclusion

Examiner note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the contest of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday(8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 for official communications; and

Art Unit: 2154

Page 9

Ulen Jai L.

(571) 273-3969 for status inquires draft communication.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

January 4, 2007